

ILLUSTRATIONS. Desirationals—A years Dogs versus wool Dogs versus wool Dreinings and utilising weeks of Dreinings and utilising weeks and Dreinings and utilising weeks and Desiration of the property of steamer and self-mover, Fon-B E water discharge, Bagley's, rd-table crishion, Decker's, fagrener, Wing & Bradesn's, rod, Hutton & Mee's detaching apparatus, Huntgton's letaching apparatus, Mas-y's. 206 ost-detaching apparatus, Massey and Service and Servic 22's theiderich's tate. Beynolds & Cutier's riage-top slat from tee extractor, Woodes and tee extractor, Woodes ment-spreading machine, Palierger, Dicker's, are ger, are 0 . L 6 MISCELLANY. iles and sabots. I've in the shop -cadjusting, Davidson's 388 Jack Ayres Making attachment, Mo -cacker, Lorder's 541 -cacker, Lorde Figures followed by Stars (*) to illustrated articles. 34 Cryptograps, Cryptograps, To Cryptograps, Tronitron Cryptograps, Tro 170 American emery abrond 158 American exhibitors at Paris Exposition 286 American exhibitors at Paris Exposition 286 American included 286 American incomplete 386 American incomplet

207 254

111.	A STATE OF THE SAME OF THE SAME
Printers' wants and don't wasts. ? Printing machine, matrix, 8 week's Printing pictures	Work projected, great
Proscription of merit. Pseudo-scientine speculation	Yacht race, the cosan
Quickaliver mining	Yacht race, the ceean
Raft voyage to Europe	PATENT CLAIMS.
Haliroada, sievated, to relieve the city Haliway, Channel submarine 17 Haliway system, the public 31 Haliway system, the public 31 Haliway, underground 2, 3 Hain, how to save 34 Hain, yellow 4 Hazors how made 4 Hacipes, various 318, 971 E-laventione 54	_
lain, yellow	Abrasive powder
sacors how made	Addressing machine
Rights of partial sesignes to a re-	Air baths, hot and cold
lights of society and of labor. 27 lights of society and of labor. 27 liver steembosk, unique. 22 looman numerals. 26 looman numerals. 26 looman numerals. 27 looman numerals. 28 looman numerals. 28 looman numerals. 28 looman looman light numerals. 28 looman looman light numerals. 28 looman light numeral	Air compressing. 10 Air exhausted from fruit cans 10 Air heater, furnace. 904 Air moistening, cooling, etc 139
	Air, compressing. 278, 284 Air engins. 10 Air exhausted from fruit case. 110 Air heater, furnace. 384 Air, moiscenting, cooling, etc. 128 Air pump. 48, 307 Air of the state o
halt mountain. aponification, new method of. 114 aws for saving method of. 27 aying and meaning 17 aying and meaning 18 ceance and art in China 18 ceance the latest Parisin fashion 18 ceanting American office 18 is centific American—new volume 418	Alcoholi rectifier, etc
Se ientific American—new volume Scrap iron for heavy forgings	Ale, brewing 28 Alloy for mold boards, etc. 145 Amalgamator 45, 80 (3), 57, 239, 285 Ammoniacai gas, utilizing 41 415
Ships, wooden, conversion of	Ammoniacal gas, utilisting 11 Anchor, floating 146 Anchor, floating 148 Anchor stock 168 Animal marker publish 688 Animal marker publish 688 Animal marker publish 688 Animal marker 698 Animal floating 168 A
Skate, a neat. 24 Skeleton leaves 117 Silk culture, California. 40	Anvil horsehoe-calk 45 Anvil horsehoe-calk 12 Apvil trunk-riveting 12 Apple gatherer 257
Smelting furnace a new	Anti-heumatic compound 188 Anvil, horse-hoe-asik. 13 Anvil, struk-rivesing. 13 Apple parer, etc. 159, 414 Armor plates, protecting 2- Artificial arm. 157, 200, 206 Artificial teeth. 157, 200, 206 Artificial teeth. 151, 151, 154, 154 Artificial teeth. 151, 151, 151, 154 Artificial teeth. 151, 151, 151, 154 Artificial teeth. 151, 151, 151, 151, 151, 151, 151, 151
Snow storm, scientific. 26 Seds ast. 121 Sodium Scientific canard. 197 Solar Agry, chemical force of 344	Ash sliter, etc. 130, 200 Atomising tube. 13 Auger 75, 207, 206 Auger , earth. 205
South America, new route across 322 South American Mediterranean. 141 Spectacles, hints on. 188 Speculations on the future. 188	Auriferous sands, gathering, etc 46 Awi handle 222 Awning 384 Axie box 144, 150, 160, 222, 854, 286, 480
Steam boilers, corrosion of	Atomising tube
######################################	B [1
cisentific American office se tentific American new volume se tentific American new volume set tentific American new tentific and tentific and set tentific and t	Ilahy carriage
Steel bridges and subaqueous tun- peling 217 Steel, Damascus 284 Steel, hardening 282	Desic-cloop lastening 128, 170 Balc tie-
iteel, tompering, etc	Bar straightener
painting 22 toves, vs. grates 43, 166 street crossings, tunneled 26 treet pavements, our 266	Barber's chair 190 Barber Sork 300 Barber Sork 300 Barrel bangs 191 Barrel bangs 94, 95
trength of materials. 314 inbetance, a new 104 auction 7 ductor 8 duct const, the 991	Barrel-hoop clasp
steel bridges and subaqueous tun- neling neling 377 theel, Dannacous	Basin plug. 207, 208 Basin plug. 208 Basin plug. 208 Basket machine. 145 Batt tub. 344 Batt for faiting wadding etc. 400
windling, new species of 361	Bearing for machinery, self-oiling, etc. 12
ank staves, rule for	Bearing for machinery, self-oiling, etc. otc. otc. otc. otc. otc. otc. otc. o
olegraph wire drawing 54 clegraphs in Europe 57 clegraphic machines, new French 185 clescopic discovery 50	Bedstead fastening
anning process. Preliers. 177 cach in the South 177 cach the 187 cach	Beer cooler
own, old black country. 254 oy new chemical. 101 rade marks. 125, 124 rades union terrorism. 25 rades union terrorism. 25 rades union terrorism. 25	Beit-lap cutter. 145 Belt lapping prevented. 307 Belt punch. 37 Beit rivet. 256 Beiting, mechine. 45
rial of breech-loaders, New York State. Tichinissis. Ty square, substitute for. Unnel, tunnel, tunnel, 198	Beitung, rubber. 79 Bench dogs. 297, 398 Bench plane 289, 268 Bench vise 251 Bending meohine 224
turning tapers 148 (wenty-five cents' purchase 170 U	perths. self attachment for
Prights on a plane, etc	Rever aquare 444 C
Velocity per hour. 2006 Ventilators operated by solar heat 250 Vessel canght in Polar ice. 225 Voluntary police association. 190	Bits attached to braces
Watches, odd	Bias king dish, etc. 415 C Bhasting, artiflery, etc. 12 C Blasting powder 113 C Blasting with nitroleum 12 C Blasting with nitroleum 12 C
Velocity of shot measured	Blind stat clasp and pivot. 198 C Blinds stat fastener. 11, 337 Blower. 355, 331 C Blower. 112, 142, 192, 241 C Boarding machine.
Water spouts—western N. C. mountains. 37 Water supply of towns. 36 Wayes, sonorous and luminous. 26	Boat and davit tackie. 257 C Boat builder's platform 330 Boat detacher. 44, 68(4), 81(3), 94, 95, 96, 161, 224(2), 240, 256, 271,
Whate, poteon for	Boats, bracing, etc
chilled. 286 Wheals on pavements. 308 Whitworth ordnance 52 Windmills in New York City. 89	Boiler for pitch, etc.
Wirbel bewegung	Boiler tube cutter98, 97, 308, 340, 335 Co Boiler tube cutter98, 97, 308, 340, 335 Co Boiler tube ferrule

book and more was presented as a process of the company of the com		Fcientific	American.
144, 286 Car-spring. 65, 225, 804, 805, 284, 414 Compound off for paint, etc. 22 Compound off for paint, etc. 23 Compound off for paint, etc. 24 Compound off for paint, etc. 25 Compound of refine cider, etc. 26 Compound for reinghouse, etc. 27 Compound for reinghouse, etc. 28 Confection pas, steam. 28 Confection pa	1 1 1 1 1 1 1 1 1 1	Bolfand Solt heads 191, 200, 200 Bolf and sylves trimmer 201 Bolf and tyres trimmer 201 Bolf knoder 201 Bolf and tyres trimmer 201 Bolf knoder 201 Bolf and tyres trimmer 201 Bolf knoder 201 Bolf targer 201	Carriage box bearings
		Car-seat arm Car-seat look	Composition for invital state of the composition in the central state of the composition, sharpening-stone. In composition, sharpening-stone, and state of the composition for artifactal stone, etc. 287 compound for glanders, etc. 288 compound for fighteen, etc. 384 composition for ringhous, etc. 384 condenser, 485 co

		[June 2
23, 256, 8	Cornet bells, forming	Extension horse Extracts, making Eye glass Eyejet butten.
12, 240, 8 18, 150, 8		Eyelet machine4
48, 97,	Correct loom take-up. 79. 81. Cotton and hay press. 79. 11. Cotton-bale tie	Pagots for railroad Fan, brush, and rack Fare box.
19, 851, 8 18, 851, 8 48, 128	Cotton chopper, etc96, 305, 85 Cotton cleaner	Fare box. Zis, 72 Faucet. Zis, 72 Feather cleaner, etc. Feathered cloth. Zis, 72 Feathered cloth. Zis, 72
(5, 997, 41 2), 197, 90 , 191, 90	Cotton compress. 25 Cotton caltivator 18, 47, 128, 129, 227 Cotton, etc., preparing 48, 20, 228, 41 Cotton-plant thinner 48, 80, 228, 41	Food rack
	Cotton planter175, 178, 197, 271, 412	Fence12, 47, 64, 65,
12 36, 36	Couton scraper Counter and desk seat. Covers attached to kettles, boliers, ste. Cover lifter, hammer, etc. Cover, tub or barrel. Covering for bottles, steam pipes.	Femce and gate. Pence picket sharpen
8, 178, 47		Fence post
eech-	Covered State Co	Ferrules, making. Ferthiser Fertyboat locking ap Fiber of plants, prepa Fbrous plants, utilizing Fid Fifth wheel Fither
161, 176 146 46, 331 for 136	Cradle. 12 Cranberry gatherer 17 Crans frequer 18 Crass frequer 18 Cris and walking stool 44 Crinping machine 19 Cross bow 5 Cross bow 5 Cross bow 5 Crass frequent 19 Crass f	Forous plants, utilizing Fid. Fifth wheel. File cutter.
6, 207, 351 415 519	Crupper, spring 46	Plie catter Piling and recording Filter and cooler. Filter and cooler. Filtering tube, well. Fire alarm. Fire-arm back sight. Fire-arm, breech-load 199, 63, 64, 128, 127, 300, 240, 251, 252, 353
64, 148 64(2) 5, 192, 893	Conf. 192 Cultander boiler . 397 Cultivator . 45, 47, 48, 44, 48, 51, 48, 110, 112(3), 113(2), 117(3), 118, 129, 124, 144, 144, 188, 189, 160, 161, 174 (8), 175(5), 177, 208, 209(3), 223, 224, 224, 225(3), 272(2), 287(3), 504	Fire-arm back sight. Fire-arm, breech-load 139, 63, 64, 136, 127, 300, 240, 351, 352, 358
ge 306 206 127	(2), 305(2), 330, 331(2), 335(2), 336,	Fire-arm, magazine Fire-arm safety nipple
177	Cultivator and plow. 12, 40, 64, 111, 128, 148 Cultivator and planter. 256 Cultivator teeth, etc. 47, 271	Fire-arms, revolving Fire brick
ng 150 49 1, 1993, 401 10, 65, 156	Cultivator and plow13, 46, 44, 111. Cultivator and planter	
	Cushions, applying springs to 172 Cutlery 182, 282 Cut-off, electro-magnetic engine 173	Fire extinguisher. Fire grate for steam be fire kindling. Fire ladder. Fire-proof estings and Fire-test toroh. Fireplace12, 144, 23 Fireplace heater. Fish hook.
	Cushions, applying springs to	
hey. 384 400 3, 228, 271	Control of the Contro	Flax cleaner
, 973, 861 136 967 865	Damping apparates	Fleah fork. Fleah fork. Floating battery, etc. Floor cloth roller. Flour bolt
, 2005, 806 113 203 203 219	Dentist's chair	Flowers, etc. preservi
191 100, 440	Degrick	Finid ejector. Fluid measurer. Fluting machine. Flux, iron and stoel w Fly brush and fan. Fly nets, cutting.
200	Dikes and levess, constructing 209 Dinner bucket 206	Fog signal
),413 (D)	Dish pan and drainer 254	Foot bath. Foot rest. Foot stove and lanter Foot seraper.
205 868 206 306 191, 200	Disching mechine	Forge gas chamber, et Forging apparatus10, Fork, agricultural Fork and cake lifter Fountain
366 366 307 330, 860	Divining Resource St. 128, 139, 169	Friction clutch
.884, 306 136 ng 255	Door holder 413 Door indicator 587 Door key attachment 520 Door knobs, etc. 192, 225, 385 Door knobs, etc. 192, 225, 385	Friction pawl Fruit and ice house Fruit basket machine. Fruit box and handle
191	Door spring. 10, 48, 299, 821	Friction matches Friction pawl. Fruit and ice house. Fruit backet machine. Fruit box and handle. Fruit dryer. Fruit dryer. Fruit dryer. Fruit galberer. 12(2).
319, 300 300	Door stops	Fruits, cooking and pr Fuel, artificial. 45, 68,
386, 417 112 128, 804	Dovetail machine	Furnace-blast heater Furnace door and bit Furnace-draft cheeker. Furnace feeding basket
\$78, 852 \$25, 866 254	Draining machine 80 Draining tile 852 Draft attachment, vehicle 289, 414 Draft plate 289	Furnace grate Furnace heating drum. Furnace-mold clamp Furnace radiator
368, 558 .11, 584 200, 289	Draft pole attached to moving machine 2822	Furnace-blast heater. Furnace door and bit. Furnace-fraft cheeker. Furnace-fraft cheeker. Furnace freeding basker Furnace grade. Furnace-fraid
64, 851 .84, 851 .85, 871	Dray 22 Dredging box 60 Dredging machine 60 Drfff 100 Drfff 150 Drfff 150 Drfff 150 Prfff 170 Drfff 20 Drfff	Furniture, marine Furniture polish Fuse for explosive shell
161, #15 266 198	Drill spring for quarrying 340 Drinking cup 64 Driving belt 288	Gaff, ship-spar
96 985, 400	Dry dock scaffolding	Gaff, ship-spar Galvanic battery, gener Galvanic battery, reme Galvanized iron railroa Game, pastime. Game register. Gang plow. 98, 137, 33
176, 568 150 136 806, 835	Drill pring for quarrying 260	Gang plow96, 127, 38 Sm. 367 Garbare box Garment fastener Gas and air, carburetts
.11, 192 175 190	Dung hook Durogel, from giue, etc	Gas burner, etc
etc 225 ees 337 \$55		Gas condenser, etc Gas exhauster regulator
940, 257 240, 257 818 etc. 237	Eaves-trough machine 79, 223, 257 Eaves-troughs, attaching 418 Eccentric, adjustable 367 Edible composition 365 Egg beater 115, 278, 368 Egg detector 223 Egg retector 225 Egg retector 225	Gas from petroleum Gas generator, etc Gas heater and petroleum Gas, lighting
209 etc. 13, 385	Egg beater 118, 278, 368 Egg detector 223 Egg target 175 Eggs, hatching 238 175 238	Gas regulator
384 382 10		Gasoline for heating, et Gate. 11(2), 44, 46(2), 65, 113, 126, 127, 126, 175(2 223(2), 224, 225, 240, 255(2), 273(2), 233, 28
.79, 254 254 234 161 , 822	Electro-magnetic engine. 254 Electrotyping surface conductor. 256 Elevator. 145, 226, 384 Ellipses. drawing. 145, 226, 384	Gate. 11(2), 44, 46(2), 65, 113, 126, 127, 128, 175(2), 223(2), 224, 225, 240, 255(2), 273(2), 273, 28, 203, 395(3), 395, 515(2), 322, 336, 397, 333, 384, 396 (3), 38
128 396	Electric magnetic engine. 254 Fleetroky ping surface conductor. 256 Elevator . 145, 256, 504 Elevator . 145, 256, 504 Elevator . 145, 256 Elevator . 145, 256 Elevator . 145, 256 Embassing bodies . 97 Embossing consecutive numbers . 45 Embossing paper, etc. 246 Embossing wearing apparet . 252 Enatureling hard rebber, etc. 257 Englisher . 258 English	Gate latch112, 127(2). 1
our 341 93 68. 198	Enameling hard rubber, etc. 257 Engine, direct-acting 47 Engine, osciliating 28 Engine, reciprocating 368	Gate Mage. Generator for vapor la Gig mills. Glass, annealing. Glass cleaner. Glass letters, etc. Glass-melting pot. Glass pot. Glas
, 97 (2) 192 490 233, 896	Engine, traction	Glass ore, purifying, etc Glass ware. Glassware molds Glassers' diamonds, mou
256, 819 250 250 414	Evaporating pan feeder	Globe clock
175 229, 184, 885 417 (2)	Excavating and dredging.	Glue pot
772, 3677	Experder. 126 Experder 138 Express call :1gms 113	Gold from river bottom

イ : 150mm (1) 450mm (1) 150mm (1)

THE ST

JUNE 29, 1867.]	
Gold separator Governor 15, 68, 175, 176, 206, 205,	
Grain bin.	15 85 17
Grain cleaner	20
Grain dryer	
Grain secting Grain separator, etc 11, 126, 196, 4 Grain shovel and handler Granary	
Grape arbors. Grape vine trellis. Grate	
Gravel wagon	11.07
Gridicos cover 176, gridicos cover 176, gridicos cor polisher 172, 130, 231, Grinding mill45, 46, 112, 130, 231, 331, 331, 331, 331, 331, 331, 331	
Grindstone. Grindstones, dressing adard tools	7
On Card, circular sav Gun cotton, manufacture of Gun harpoon	28.00
Gun harpoos. Gun, many barrelled	- FEE
Hair crimp'r	1
Hammer, screwdriver, etc	200
Handle, boiler gage coek. 4 Handle, shovel or fork. 23 Handle, signal lantern. 25	87
Handles attached to brushes, etc., 118, 23 Handles attached to cattery	NAME OF STREET
Hanger box, crank-shaft. 9 Hanger for stove hooks, etc. 181, 23 Harness buckle.	Par per met
Harness clamp	,
Harness-pad block	77.7
Harness tree. Harness trimmings covered with rubber	L. Carlo
Harvester. 44(8), 70, 123, 207, 208(2), 209, 384, 384 Harvester. 44(8), 70, 142, 142(8), 140, 176, 180, 209, 208, 308, 375(7), 703, 164 (3), 413	
Harvester cutter-har 23	K
Harvester pitman Harvester rake, 63, 136, 144, 208, 200, 200, 201, 200, 204, 267, 369,	K
Harvester reel	KKKK
Hasocks, forming	KKKK
Hat below amelines 190	KKKK
Hat former, machine. 178, 240, 272. Hat-poonering machine. 178, 240, 272. Hat ip puller. 177. Hats, felting, ctc	KKKK
Hawse pipe	KKKKK
200, 241, 271(2), 278, 287, 804(2),	KK
Hay-fork shank and socket. 201 Hay forks, suspending. 365 Hay knike. 365 Hay knike. 365 Hay knike. 365 Hay loader. 361, 354, 367, 368, 355(2)	3333
Hay press	L
Hay stacker	1000
Heading wrench bars	Li
Heater and ventilator	1
Heating care, etc. 100 Heddie eyes. 355 Hedge trimmer and mower. 177 Hedges, planting. 79 Heel-shaving guard. 341 Hool stiffener. 377 389 Hemp brake. 127 389	
Hide shaver 13, 230	La
Hinge127(2), 150, 160, 198, 207, 788,	1414
Hitching hook	Le
Hog lose 67. Hog holder 507 Hog elanghtering device	L
Hoos attached to bandles 209 Hog fiee er 200 Hog holder 307 Hog beat 707 Hos beat 707 Holsting apparatus 61, 128, 101 108, 207 207, 206, 208, 208, 207, 208, 208 Holder for slotted tools 202 Honey extracted from the comb 50 Hoof pad, elastic 44	Le
Hook back band 177	Le
Hoop for skirts 238 Hoop machine 320 Hoop, return grace 65 Hoop skirt. 49, 65, 79(3), 175, 238, 239 (2), 254, 367	IA IA
Horp-skirt clasp	Le
Horp-akirt clasp. (2), 234, 387 Horp-akirt machine 971, 415 Horp-akirt-spring enamel 175, 200 Horp-akirt-spring enamel 145 Horp-akirt wire, marking 113 Horp-akirt wire, marking 113 Horp-akirt wire, marking 123 Hop kina. 319 Hop trellia 355	L
Hop kilas	Li
Hop kins. 319 Hop trellis. 365 Hops, cultivating. 49 Hopple for horses. 222 Horn, whitening. 29 Horse bristle boot. 113 Horse collar. 144, 181, 330, 335 Home cribbing presented. 113 Horse holder. 241 Horse hood-parer. 192	L
Horse cribbing prevented	Li
Horse hoof-parer. 16, 144, 352 Horse-power, 16, 144, 352 Horse-railway car. 15, 125, 124, 64 Horse r ks. J6, 64, 112, 115, 125, 124, 125, 129, 225, 223, 221(7), 257, 262, 254, 415 Horses detached from vehicles, 11,	Lie
Horses detached from vehicles, 11, 47, 127, 150, 381 Horses' necks, protecting	Lo
Horses detached from vehicles 11, 47, 127, 159, 331 Horseshoe, 18(7), 143, 159, 169, 269, 417 Horseshoe blanks, rw regins (2), 171 Horseshoe blanks, rw regins (4), 416 Horseshoe machine (319, 507, 255 Horseshoe machine (2), 225, 388 Horseshoe alls (2), 225, 388	2020
Horseshoe nail machine 174, 193 (2), 223, 368 Horseshoe nails	Lo
Hose, leather, manufacture of 12	Lo
House, portable	Lo

	Frientifi
Houses, construction of Hub. Houses, construction of Hub. Hub. Hub. Hub. Hub. Hub. Hub. Hub.	Logging skid Loom, 112, 137, 397, 388, 381, 371 (2) Loom hereast, hanging, etc. Loom hereast, hanging, etc. Loom hereast, hanging, etc. Loom hereast, hanging, etc. Loom picker motion. Loom picker motion. Loom picker motion. Loom shadie quart. Loom shadie quart. Loom shadie quart. Loom stop melon. Loom treadle, etc., operating, 137, 160, 160, 160, 160, 160, 160, 160, 160
inhaler ink, composition for interfering extendment incline for interfering extendment income for interfering income for interfering income for	Machine gearing. Magic arrow of Marking compound. Marking for arrow of Marking. Marking for carpet lining, etc. Marking for carpet lining, etc. Marking compound. Marking for carpet lining, etc. Marking compound. Marking for carpet lining, etc. Marking compound. Marking for carpet lining, etc. Marking for carpet lining, etc. Marking for carpet lining.
Jacks for remaining has been 11. 12. Jacks for remaining has been 12. Jacks for remaining has been 12. Jacks for remaining his been	Meast, cooling and packing 111 Meast cutter 95, 588, 307, 414 Meast hammer 180, 588, 307, 414 Meast hammer 180, 588, 307, 414 Meast hammer 180, 588, 588, 589, 589, 589, 589, 589, 589
Keel b'ock	Metal Dars, sheping, etc. 273 Metal Dander. 174, 200 Metal Dander. 174, 200 Metal Dander. 174, 200 Metal Dander. 174, 200 Metal Canador Dander. 174 Metal Dander. 175 Metal Dander. 175 Metal Canador Da
Eniting machine, rotary 173, 273 Aniting machine take-up. 117, 100 Knobs attached to door latches. 280 Knuckle joint. 280 Label, direction 19, 220, 220, 200 (9), 414 Label, direction 17, 200 (9), 200 (9), 414 Label, direction 27, 200 (9), 200 (9), 414 Label, direction 27, 200 (9), 200 (9), 414	Metronome
Amp brimer 11, 112, 100, 178, 304, 40, 400, 400, 400, 400, 400, 400,	Read for grooved rolls
ard strring and cooling 199 ast lock 444 stoh bolt constructing 65 atch, gate and door 12 ach, plastering 65 atch, gate and door 182 ach, plastering 65 atch, gate 67 ache 186	Mortising machine
amon aqueezer 8, 349 assa, photographic. 41, 41, 41, 41, 41, 41, 41, 41, 41, 41,	Xail drawer
inks and hooks, connecting. Bits just for carbureting gases. 286 just for gases. 2	Oar

u	American.	
CAS BREES DAUGHERSREESERS	Off. perifying, etc. Off etill indicator Off trails, etc. Ore concentrator Ore concentrator Ore-trails, etc. Ore-trails, etc. Ore-trails, etc. Ores, francing, etc. Organ Orga	Poker, tons Polishine to Polish
142 143 143	Packing mashole. Packing for engines. 602. Packing for engines. 602. Packing for engines. 602. Paddie wheel, L(1), m. 102. Paddie for interfering horses. Padiock. Padiock. Paddie of interfering horses. Padd for interfering horses. Paddie horses. Path burner. Paint oas horses. Paint pots hong to sides of build- Juffer for horses. Paint	Propeller re- propelling of pr
	ren and ink case ren holder ren holder ren holder ren holder rencil somposition for rencil sampaner retrolem prosed with resem. (ct. 76 retroleum decodorising retroleum cic. storing retroleum cic. storing retroleum cic. storing retroleum cic. storing retroleum server retroleu	kaliroad frog Railroad plota Railroad plota Railroad plota Railroad rail Railroad
**************************************	Secon packing, 135, 137, 194, 204(1), 205, 300, 300, 371, 300 Secon packing, 135, 300, 300, 371, 300 Secton packing on on one of the secton packing on the secton packing of the secton packing on the secton packing of the secton packing on the secton packing of the secton packing	cost a crace, cocing chair cotting chair conting chair chair conting chair c

-		_
	Poker, tongs, wrench, etc 1	T
	Poker, tongs, wrench, etc	П
	Post augers	H
	Post-hole auger	Ħ
Ti Mi	con-hole super con-hole direct con-hole direct con-hole direct con-hole direct con-hole direct con-hole super c	11
C	300, 161, 200, 200, 271(2), 272, 204. 305, 210, 200, 201, 300, 304, 460, 414	H
	Potato dell	11
	Pottery molder	l
	Powder mixer	8
	Printing for the bhnd	II
E	Printing-machine inker	l
	Printing on uneven surfaces 192	8
70	Printing press	8 8
	Proof meter, etc., spir.t	9
74 90 80	Propeller, 10, 47, 64, 130, 180, 100, 161, 260, 852, 864, 380	18
	Propelling care, etc	Bala
7	Protecting china, glass, etc 371 Protecting metallic surfaces, etc., 271	8
	Proglous metals from river beds di	8
	Preserving house	
4	Press . 10, 340, 504, 500, 507, 600, 400, 417 Pross strainer	
4	Printers lak, compound for 278 Pruning shears 187, 180, 807, 300, 807	81
1	Puddling iron	Bi
10 10	Pulley block, differential 806	F
3	Pulley or g coved wheel 44	84
0	Pulleys, self-lubricating.	
4	Pump, 11, 12(8), 46, 48, 68, 78, 94, 96,	94
1	Fulley holes, differential. 507 Fulley holes, differential. 507 Fulley for beiling. 508 Fulley me beiling. 508 Fulley me beiling. 508 Fulley me beiling. 508 Fulley me beiling. 508 Fulley, salf-ubrication. 508 Fulley, sa	8
6	Punching mashine	86 90
	Punching press	50 50
ŧI	Q	80
6	Quarts erusher	80
1	Quarts crusher	Bo
7		80
	Rack, adjustable	Be Be
	Had engives for paper making 13 Hall claw bar	Bo
1	Hailroad accidents, preventing	80
d	Railroad box and journal	Bc Be
	Railroad car	Be Be
	Railroad-car salety seat	Se Se
d	Railroad cars, unloading	Ba Ba
8	Hailroad cog rail	Be
1	Ratiroad curve, turning	Bec
	Hailroad picks	Sec
u	Hailroad-rail fastening	Se
1	Railroad ratis, repairing98, 120 Railroad ratis, straightening 190	Bel
ı	Railroad signal lights	Bel Bel
ı	100, 177, 261, 207, 305(2), 519, 800, 306	5e1
ı	Railroad switch, operating 148	Re
H	Halfroad water tank	Ber
1	Hailway-car door	Bet
t	Hailway-our head reef	Ser Ser
ı	Bailway carriage window	100
H	Railway selety guard	Ser Ser
	Hallway switch and signal	Ber Ser
li	faiding bents in buildings	Se:
ı	Range and furnece	Shi Shi
11	Beamer	
ľ	Beirigerator44, 40, 111, 136, 160, 100, 100, 100, 100, 100, 100, 10	1
11	Register, hot-air, frame, etc 11	She
H	Sar ulator, time-piece	Sh.
H	Bein suspe, wire,	
1	Boot for grinding tools	20.
ľ	tovenue fraud on spirits pro-	
1	Boo-hulling machine	
H	siddle, mad washer	
l	Ring, hollow	4
Н	load scraperidi, 176, 276, 201, 416	Sh e Sh e
ı	locking or be or cradies	
П	od eniter	
ı	iolis, elastic, manufacture of 100	
	Soller and seeder	The Charles
1	Boller for plow elevises, etc	Hho Sho
1	lollers for wringer	lho lho
B	tolling mili	tho
I	loof, foundation for	tho tho
E	loofs, foundation for	sho thu
	tooling attached to buildings 79	in the
H	loofing composition 48, 64, 98, 198, 175, 198, 208, 223, 254, 397, 384, 984	igi
-	loofing-composition mixer 300	all'
B	096 macking	Wik WY
MIN	tubber and fiber belts, etc 884 stabber articles, molded, etc 202	
H	tubber boot for horses	dro Ngj
III	ubber separated from porcelain	dea!
H	adder	ka
H	ta ider bearing	*
H	maning gess of land carriages 754 1	wid.

2.03	S Charles and the
ł	Saccharine liquide filtered, etc
1	Badiron Bandiro Baliron Basiron Basiron Bandiron Bandiron Bandiron Basiron Bas
4	Safe lock. 240 Safet 44
	Safety bridle Safety chamber, oil-tank, etc. 55 Safety pager. 55 Safety pager. 65
	Bails, recting device.
	Band box and cerriage exise
184	Sand washer. Sap sport. Sach and blind fastener. Sach fastener, 15, 46, 118, 111, 118, 130, 191, 300, 300, 107 (1), 508, 401, 413 Sach hanging and looking.
-	130, 191, 280, 260, 267 (2), 388, 401, 415 Sash hanging and looking
1988	Sash-spring holder
1883	Sach tightener. Sash weights, molding. Sausage Stuffer.
43 44 417 20 417	Saw blades, maunfacturing
	Saw handle. Saw mill, 10 (2), 12, 45, 47, 44, 126, Saw mill, 10 (2), 12, 46, 14, 16, 46
806 260 101	Saw-mill dog
***	Saw-sharpening rests
-	Sawing-machine, gage. 134 Sawing shingles, etc. 134 Sawing shingles, etc. 138
	Scaffold bracket. 41, 75 Scaffold bracket. 41, 75 Scale pivote, grinding. 417
	school desk. 17, 80 iscaors sharpensy
416	Screen, door and window
100	screw machineiff, 184, 188, 414 screw micker
144 118 138	Screw tape, cutting
150 111 150	Scuttle door, dry-dock, cha
ST 857	Seat, folding.
95 83 84 44	Seat or shelf. Seats fastened to carriages
	Reed dropper attached to how 198 Seed planter, 75, 66, 111 (2), 118, 188,
M6 M5 20 196	Seed sower. 111, 186, 161, 818, 880, 161 Seeding machine 47, 66, 70, 111, 135, 146, 161, 267, 418
12 162 168	Self-lubricating banger, 440
70	Sewing horse. Sewing machine 46 (2), 46 (5), 78. 80, 144, 161, 289, 389, 188, 271, 388, 288 Sewing-machine braider.
70 20 20 17	sewing-machine cloth gatheres 111. Sewing-machine cloth gatheres 111. Sewing-machine cloth haider 111. Sewing-machine embroideres 417
	Sewing machine guide the sewing machine platfer the sewing machine chuitle chuitle the sewing machine chuitle chuit
듸	Sewing machine shuttle topolon. 151 fewing machine spool holder 164 fewing machine spool holder 164
971 804	Sewjag-machine work supporter.
	Shaft whosh, tightening, etc
04 11 11	Shank forter
8 8 8 8	Shearing motels
12	Shoop pen
12.00	Sheet-iron, manufacture of
1000	Shoot-metal , Shiebling
16	Sheet or bar motel entire
1 1 1 1 1	Shingle machine
100 %	Shoe brane
10 10 10 5	Shoe binding
20.00	Shoring horars
	Shoting metals. 98. Showlder braces. 17, 88. Showed plow guard. 97, 88. Showed half. Shouter faconing. 191, 18, 18 Shuttle, castler.
4	Shuttle, nerrow ware loom
5440	mile thread winder, etc
400	Hak trep
3	Sign (hote, 410. Skare, 79, et, 143, 200. 340(8), 380, 401, 416 Skare fastering
	kelp-bending machine

IV.	
kirs binding 200 sigri closes	teset compound for welding
apring for vehicle 34, 58, 58; 59; 59; 50; 50; 50; 50; 50; 50; 50; 50; 50; 50	Teble cover 6, 6, 175, 196, 205 Table cutjerr 60, 207 Table cutjerr 7, 50, 307 Table cutjerr 10, 307 Table cutjerr 10, 307 Tacle 10, 307 Tacle 10, 307 Tacle 10, 307 Take or abel 10 Take

	Fcientific	
	Ciccutific Tricot note and claim bill The and brief The content prop machine The content proper machine To be proper machine To be content proper machine To be c	
	tarniadie. distilling	
0144 44M00100000001170 60070828705 78175	Umbrella india-rabber covering. 12 Umbrella india-rabber covering. 13 Umbrella india-rabber covering. 15 Umbrella emporter. 25 Uberina-support director. 25 Userina-support director. 25 Valve, balance. 25, 27 Valve, balance. 25, 27 Valve, balance. 25, 27 Valve, balance. 25, 27 Valve gear. 25 Valve, bolance. 25 Valve, bolance. 25 Valve, bolance. 25 Valve, bolance. 25 Valve, stole. 25 Valve stole.	· 「 日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日本の日
	Ventilating pipe for houses 128 Ventilating skylight. 128 Ventilator for mining shafts, etc. 44 Ventilator for mining shafts, etc. 44 Ventilator for mining shafts, etc. 44 Ventilator for windows, etc. 113 Vessels of two or more metals. 46 Vinegar apparatus 46 Vinegar 188 Vota venture 188 Vota venture 188 Vota venture 188 Venture	大学教育教育教育教育教育教育教育教育教育、 1911
	Wagon body	10

	Santiful.
ä	Tagen brake heiger, etcm., an
	Total Super Parties
	Wagon seet supporter
	Transport political
ì	Vacon touche supporter
	Wagon-wheel look
	Walk, Ventilating, etc
	Washer and Wringer
6	Washing corriage wheels 10
7	Washing machine, 12, 40, 44, 54, 55, 56, 57, 111, 11049, 110, 110, 110, 114,
	27, 771, 781, 381, 384, 384, 384, 384, 384, 384, 384, 384
	Washing machine, dish
	Watch case.
1	Watch-chain factoring
1	Watch regulator Watch oprings, measuring oversith
	Watches, stem-winding
7	Water-back shield in ranges Water changed into steam genera-
1	Water closes trap cleaner
7	Water elector, 66, 64, 76, 195, 667, 457
	Water Indicator, boiler
1	Water pipe, cleansing.
1	197, 176, 168, 325, 254, 525, 525, 414 (2) Water wheel gate.
1	Weather strip, 175, 226, 226, 326, 326, 418 Wood cutter
1	West bobbins. 143 West straightener 143 Weighing apparatus. 47, 415
1	Weighing apparatus
104	Well tubes drawn from wells 175 Wall tubes, driving
9	Wheat dampener
	Wheat dampener. 94, 145, 394 Wheat drill 94, 145, 394 Wheel and axis connection. 95 Wheel carriage
	Wheel hubs, carriage
	Wheels for vehicles
5 1	Wheelwright's bench. Whime-attachment for carriages 177 Whime-tree attachment to plows. Whime-tree book.
	Whiteletree hook. 608 Whip 1906 1907 Whip rack 607 Whip socket 181, 177
8	Whip scott. White and bird call. 128 White and bird call. 128 White and bird call. 128 White sead, manufacture of 128 White lead, manufacture of 128 White
	Winch or capstall. Windless wi
	Window bind 45, 178, 207 Window blind fastening, 12, 47, 187,
1	Window-blind roll cutter,
	Window fastener
5591187500000000000000000000000000000000000	Window sash sigrator. Window-sash fastening, 45, 96, 228, 416
	Window-sash frame. Window-sash supporter, 26, 110, 127, 220 Window-sash, hanging. 415 Window-sash weight.
	Window each weight. 267 Window each Window shade . 170, 204 Window shade roller . 24 Window-shade supporter . 25
	Window-shade supporter 5 Window-shutter insteaming 177
	Winnowing screen
	Wire cutter
1	
1	wire, tempering. 418, 418 Writing blind slats. 47, 48 Wood-beating machine. 47, 48 Wood-carriag, open, imitation of. 111 Wood coated with rubber, etc. 48 Wood impropanded with far, etc. 480
1	WOOD MOINTE CHICEL WEST 414
1	
1	Wood screws 415, 416 Wood secured to metal 416 Wood splitting machine 46, 386 Wood, stuffing and var-sishing 13 Wooden-box bead cutter 386 Wooden-picket machine 45
11	wooden-picket machine 48 []

i	TO STORY OF THE R. P. L. S.	3 5	į
l			į
	Wool pasting take.	11:	į
		11:	į
	""等是是 图,以始终	12	į
į	Wrench, mine, etc. 446 (2		ļ
l	Winger for doctor and more & Winger for doctor and more & & & & & & & & & & & & & & & & & & &	11:	
i	Wringing machine		į
	Writing paper	jje,	į
ŀ	Y	1 22	d
1	Tare-beam friction assessment 10		į
ì	Tarn-beam friction appoints IT Tarn, manufacture of	1 55	į
1	Tarms, stc., bleaching and dyeing to	100	į
1	2	133	į
í	Zine ores, smelting	16	į
3	Zine separated from gold, etc 100	14	i
1			į
3	Reissues.	100	į
ł	Animal matters se fertilizers 28	14	į
1	Bessive	10	i
į	Billiard-table cushion	18	i
ł	Boat-detaching tackie	1	į
į	Soot-beel attacher and Anisher 34	12	į
4	Bottle for druggies, etc	12	į
ı	Brick machine	日並	i
ı	Broom dlamp	M	۱
ı	Capsian, power	1	ĺ
ı	Capstan, steamboat	1	
ı	Cartridge, priming metallio	Bo	į
ı	Caustic alkali, manufacturing200 (T	Dr	į
Į	Clesp. metallic hoop	g o	į
ì	Clinco-ring machine	1 26	i
į	Coal dumper	E	į
1	Cooking apparatus, etc. Cooking apparatus, portable lamp Cooking adore. 17 Cotton-bale tis. 48, 121, 27 Cotton-bale tis. 17	100	Š
ł	Cotton-bale sie(65, 161, 273, 27	1	i
	Cream extracted from wher	Be	į
1	Crimping machine	112	Į
١	Crucible, metallic-bath 411	Bu	Ö
l	Desulphurising coal, etc	1	į
l	Door knobs fastened to spindles. 129	V.	į
į	Driving-rein holder	W	å
l	Egg pan and cake baker		
۱	Envelope machine		
ı	Explosive compound		
i	Fabric for hate, bonnets, etc	Ba	į
ì	Fester and hoppin	Bo	ë
ł	Five-arms, breech-loading49, 145, 320	Bot	į
i	Frats box	Bu	į
Į	Furnace, cupola. 145 Furnaces, reverberatory, etc. 378 Gaivanio battery 200	Cas	į
į	Galvanic battery 200	Cal	į
I	Gas apparatus	Cas	į
I	Gas burner	Cta	į
I	Glass articles, ornamenting 278	Clo	į
ı	Grain separator	Con	i
1		Cot	i
١	Handle for implements 290	Con	į
I	Handle, tea and coffee pot	Cor	į
۱	Handle, tea and coffee pot. 222 Harvester4, 8.1(3), 145, 184, 225, 225, 225, 225, 225, 225, 225, 22	Cop	ĺ
۱	Harvester cutter	1	į
l	Harvester blanch and and and	100	i
١		217	Ø
I	Holder for wiping ciotis	분	i
l	Horse-power	Hat	į
١	Hydro-carbon olis, refluing, etc.49, 256 Inkstand, barometric	Hat	
ı	Inkstand, barometric	Hat	Į
ı	Enife. 220 Enitting machines 18 Labels attached to bottles. 266 Lamp. 177, 225	Ink	i
ı		Lan	į
l	Lantern	Med	į
į	Leather scourer 225	Mel	c
١	Locks	Mol	å
	Locomotive engine	Mon	j
ı	Loom roller temple. 241 Loom picker-staff motion. 386 (241) Lubricating compound. 18	Off	į
ø	Lubricating compound	Pari	ĺ
1	ings 278	Pict	į
1	Metallic oxides, paritying	Plat	į
1	Motion, stopping and changing 22	Prin	į
1	Mowing machine	She	ĺ
Ì	Meckele noider 00	Shaf	Í
į	Packing, steam engine	Spoo	ĺ
1	Paint dan 398	Stati	i
1	Paint Can	Stov	į
į	Pagging machine65, 274	Btov	ģ
Ì	on many homest came	Btov	ĺ
ļ	Pencil-point protector	Toba	ĺ
	man car		ø



181	Weaving corded fabrics
40	
241	Designs.
207, 258 17 K, 258	Ax bandle
999	Balance
146, 393	Bottle
145	Bracket
97	Burial case
m	Carriage lamp
81	Carseat end frame
	Center piece. 256
778	Clock case
161	Coach lamp49, 1
906 a 198	Coffee and tea pot tops
829	Coffee strainer Coffin handle
822	Comb, round
(2), 418	Copying press.
80, 854	Fire engine, steam
354 (D)	Fire engine, steam. Floor olcloth
18	Frying-pan bottom
3	Handle, coster
273 200 254 284 288 288 402 278 218 218 219 222 223 223 223 223 224 234 401 244 244 244 244 244 244 244 244 244 24	Handle, knife or fork, etc
40, 55	Hat and dress ornament. I Heel plate for boots, etc. Inkstand.
25	Hat and dress ornament
386	Knife handle
77, 28	Lantern reflector 3
174 (1)	Medallion.
225	Melodeon. 4 Military monument. 3
225 285 384 18 297 81 241 36 (3)	Molding
81	Napkin ring
66 (B) 13	Ornament, American Jockey Club
er-	Piano stool
278 177 401 223 18 (3) 145 46 46 46 401 388 401 388 5, 274 5, 241 388	Princ stool
401	Printers' type
18 (3)	Sewing-machine frame 16
145	Shaft frame
1 100	Signal flags, set of
., 401	Standards, school-furniture 8
. 18	Stove
225	Stove door
5, 241	Stove plates
. 328	Tobacco box
6 (2)	Tobacco pipe
388 369 36 (2) 	
145	Washetand 200 (2) Water cooler 22 Wheel, pending 465

